

Why Research Infrastructures and not only Projects?

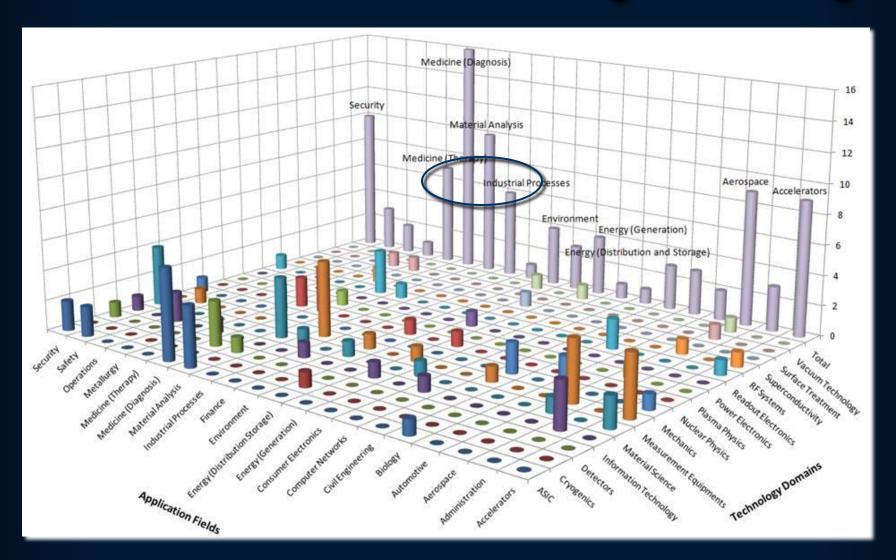
(Considerations apply to all EIROFORUM entities, CERN taken as an example)

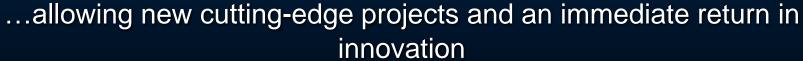
A question of optimization:

- Research cycle time scale
- Concentration of layered high-tech infrastructures and enabling technologies, requiring not only large initial investments, but also a constant upgrade....
- ...and a stable and highly skilled staff
- Multidisciplinary advanced training (together with Universities)
- Internationalization and networking
- Efficient knowledge transfer through people mobility

The most efficient way to promote **competition and collaboration** == **COOPETITION**

RI's: a Concentrate of Enabling Technologies







Distribution of All CERN Users by Nation of Institute on 9 January 2012 MEMBER STATES Austria 100 132 Belgium 55 Bulgaria 206 Czech Republic 74 Denmark 100 Finland 884 France 1303 Germany 104 Greece Hungary 58 Italy 1421 Netherlands 187 Norway 89 206 Poland 127 Portugal 60 Slovakia 358 Spain 83 Sweden 369 Switzerland United Kingdom 744 6660 CANDIDATE FOR **OTHERS** China 14 Pakistan 19 Ukraine 21 Iran ACCESSION China (Taipei) 67 Ireland 10 Peru Uzbekistan Argentina Colombia Korea 89 Oatar **OBSERVERS** Romania 75 12 Armenia Saudi Arabia Croatia 17 Lebanon India 115 Australia 24 Serbia 225 856 Cuba Lithuania 12 Japan ASSOCIATE MEMBER Azerbaijan Slovenia 37 Cyprus Malta Russia IN THE PRE-STAGE Belarus 22 21 Egypt Mexico South Africa 77 Turkey TO MEMBERSHIP Brazil Estonia 18 Montenegro Thailand 1708 USA 167 Canada Georgia 10 T.F.Y.R.O.M. Morocco 2981 Israel 62 Chile Iceland New Zealand 11 Tunisia



CERN and the Globalization Process

CERN Council deliberations (June 2010) on:

- Geographic Enlargement
 - Beyond "Europe";
 - a single entry point: Associate Membership;
 - a specific Membership path within the Associate Membership

Scientific Enlargement

- Increase networking with national RI's and Universities
- Increase collaboration with other fields (e.g. Astroparticles)

Global Projects

- Consider hosting a future global accelerator project
- Coordinate broad European participation in a future global accelerator project hosted elsewhere
- Continue investigating global governance models



In summary

Globalization has already happened in a few fields of science, driven by scientific needs.

- Satisfactory governance and funding models are so far restricted to projects. These models are in general not adequate to establish new global research infrastructures.
- Strengthening the network of RI's in the ERA is a key factor to play a major role on the global stage
- We will need
 - Visionary global policies....
 - …and a very pragmatic approach

